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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,785	05/04/2001	James T. Cash	MT-123	8861

7590

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EXAMINER

TRAN, HIEN THI

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 02/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

24

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/849,785	CASH, JAMES T.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hien Tran	1764	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3,5</u> . | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-7, 14, drawn to a valve, classified in class 137, subclass 311.
  - II. Claims 8-13, drawn to a regenerative thermal oxidizer, classified in class 422, subclass 175.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the oxidizer of claim 8 does not require the rotatable housing of claims 1, 7, 14. The subcombination has separate utility such as valve in liquid or gas meter or in turbine or valve for distributing fluid flow in an internal combustion engine.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, recognized divergent subject matter and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Mitchell D. Bittman on 01/29/03, a provisional election was made with the right of traverse to prosecute the invention of group II, claims 8-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims

Art Unit: 1764

1-7, 14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### *Drawings*

5. The drawings are objected to because in Fig. 5, 51 is pointed to the bolt instead of the manifold as set forth on page 13, line 12. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "311" (Fig. 10). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "25, 124" (page 10, line 1); "82" (page 19, line 10). Correction is required.

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "18" (page 19, line 12) and "81" (page 19, line 9) have both been used to designate the apertures; "091" (page 22, line 9) and "663" (page 22, line 17) have both been used to designate the mounting ring. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 1764

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "26" has been used to designate both the lip 26 (page 11, line 14) and the baffles 26 (page 11, line 25); "25" has been used to designate both the valve ports 25 (page 11, line 4) and the baffles 25 (page 11, line 15); "663" has been used to designate both the mounting ring 663 (page 22, line 17) and the plate bearing arc 663 (page 22, lines 19-20). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
10. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

### *Specification*

11. The disclosure is objected to because of the following informalities:

On page 11, line 15 "25" should be changed to --24-- for consistency and clarity (note page 9); in line 25 "26" should be changed to --24--.

On page 12, line 19 --or frusto-conical section-- should be inserted before "53" (note page 21, line 17).

On page 13, line 4 "57" should be changed to --57A, 57B-- for consistency (note line 3).

On page 14, line 8 "76" should be changed to --76A, 76B-- (note line 4).

On page 19, line 12 "18" should be changed to --81-- (note line 11); in line 15 "on" should be changed to --one--; in line 21 --or sealing surfaces-- should be inserted before "55" (note page 13, line 1).

Art Unit: 1764

On page 20, line 6 --or outer annular edge-- should be inserted before "54" (note page 19, lines 24-25); in line 18 --or outer annular edge-- should be inserted before "54" (note page 19, lines 24-25); in line 20 --or sealing surfaces-- should be inserted before "55"; in line 22 --or elements-- should be inserted before "105" (note line 7).

On page 21, line 20 --housing-- is misspelled; in line 25 --or frusto-conical section-- should be inserted before "53" (note line 17).

On page 22, line 17 "663" should be changed to --091-- (note line 19).

On page 23, line 16 --be-- is misspelled; in line 25--arc-- should be inserted before "663".

Appropriate correction is required.

12. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, lines 10-11 it is unclear as to how the outer housing is related to other elements of the valve.

In claim 9, line 4 it is unclear as to how the second valve port is related to the other elements of the oxidizer.

In claim 10, it is unclear as to what is intended by “congruent” and it is unclear as to what structural limitation applicant is attempting to recite.

In claim 12, line 3 “said outer housing ring seal” lacks positive antecedent basis.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 8, 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Houston (5,692,892).

Houston discloses a regenerative thermal oxidizer comprising: a combustion zone 19; a first heat exchange bed 13 containing heat exchange media and in communication with the combustion zone 19; a second heat exchange bed 14 containing heat exchange media and in communication with said combustion zone 19; means 21 for causing gas to flow into the duct; a valve 12 for alternating the flow of gas between said first and second heat exchange beds; said valve comprising a radial duct, an outer housing 26, a ring seal 39 having bore adapted to allow gas flow to or from said duct and from a seal with the housing, valve ports 31, 32 connected to the first and second heat exchange beds, respectively, inlet and outlet manifolds 51, 52; drive means 41 for rotating the valve (see, for example, Figs. 2, 3, 9).

Instant claims 8, 11-13 structurally read on the apparatus of Houston.

Art Unit: 1764

***Allowable Subject Matter***

17. Claims 9-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims, and to file the Terminal disclaimer to overcome the double patenting rejection.

18. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach the cold face plenum having at least one baffle for dividing the first and second valve ports into a plurality of chambers.

***Double Patenting***

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 8-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,261,092. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to the same conceptual invention.



Art Unit: 1764

***Conclusion***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is 308-4253. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

HT  
January 31, 2003

*Hien Tran*  
**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**